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HRM Practices and Work Outcomes: the Role of Basic Need Satisfaction

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Abstract

Integrating soft HRM and self-determination theory, we propose a model in which the presence of five HRM practices and the degree to which an employees' talents, interests, and expectations are taken into account within these practices influence work outcomes through basic need satisfaction. Data gathered from 5749 Belgian employees showed that different HRM practices satisfy the three basic needs for autonomy, relatedness, and competence and that the degree to which the individual is taken into account generally has an additional positive effect. Moreover, basic need satisfaction positively influences affective organizational commitment and work engagement, and subsequently lowers turnover intention. These findings indicate that (1) basic need satisfaction is an important, but neglected, mediating variable in the HRM-performance relationship and that (2) bearing in mind individual talents, interests, and expectations of employees within HRM practices may matter equally or more than their mere presence.

Keywords: HRM practices, work outcomes, basic need satisfaction

Introduction

Building on the notions of soft or “high commitment” HRM (Beer, Spector, Lawrence & Walton, 1984), the relationship between human resource practices and work outcomes is an increasingly researched topic in human resource management (e.g. Edgar & Geare, 2005; Truss, Gratton, Hope-Hailey, McGovern & Stiles, 1997). Founded upon a theory Y approach of employees as active, self-controlled human beings who like work, seek responsibility, and serve objectives to which they are committed, soft HRM focuses on empowering, developing, trusting, and managing employees as humans with specific needs, and predicts that performance is created through positive attitudes (Carson, 2005; Gould-Williams & Davies, 2005; Truss et al., 1997). More specifically, HRM is hypothesized to fulfill employees’ needs which enhances favorable attitudes, and subsequently improves performance outcomes (Edgar & Geare, 2005; Kuvaas, 2008; Meyer & Allen, 1997). This is consistent with social exchange theory (SET) which argues that HRM practices contribute to positive exchange relationships between employee and employer – especially when the needs of individual workers are considered – to which employees reciprocate with favorable attitudes and behavior (Gould-Williams & Davies, 2005).

While soft HRM and SET suggest that positive effects can be created by considering employee needs, very few articles have devoted attention to the potential mediating role of need satisfaction in the relationship between HRM practices and work outcomes. When looking into the process through which HRM induces favorable outcomes, the focus is generally on other mediators derived from social exchange theory such as trust and perceived organizational support (e.g. Macky & Boxall, 2007; Meyer & Smith, 2000). One theoretical framework that stresses the importance of need satisfaction for individual growth, well-being, and performance is self-determination theory (SDT; Deci & Ryan, 2004). SDT argues that individuals have three

basic needs, i.e. the need for autonomy, relatedness, and competence, of which their satisfaction is essential for optimal functioning in several life domains including work (Deci & Ryan, 2000). Quite similar to theory Y and soft HRM, SDT is rooted in the assumption of man as an active organism, who is motivated toward psychological growth and development and is willing to take on responsibilities (Deci & Ryan, 2000; Van den Broeck, Vansteenkiste, De Witte, Lens & Andriessen, 2009) making this theory particularly relevant to apply in HRM research.

This current study aims to develop and test a model on the relationship between HRM and work outcomes, which is in line with the aforementioned basic premises of soft HRM and SET. Our contribution is threefold. First, building on SDT we identify five HRM practices (direct employee participation, training, developmental appraisal, mentoring and career development) which are argued to stimulate basic need satisfaction and subsequently favorable work outcomes in the workplace. Second, we contribute to the personnel psychology and HRM literature by theoretically and empirically exploring whether the fulfillment of basic psychological needs can explain the process through which HRM practices generate favorable work outcomes. As such, we put an assumption of soft HRM and SET to the test. Third, we make a contribution to the SDT literature by identifying and investigating HRM practices as antecedents of basic need satisfaction and by studying the relationship between basic need satisfaction and several work outcomes.

The remainder of this paper is organized as follows. The first section describes our conceptual framework, integrating literature regarding self-determination theory and soft HRM. This is followed by an overview of the method used for our study. Next, the empirical analyses and results are presented and discussed. The paper closes with a few practical implications, limitations and future research directions.

Literature Review and Hypotheses

Our conceptual framework is visualized in figure 1. We explain the model in three steps. First, based on a soft HRM perspective, we identify relevant work outcomes. Next, building on self-determination theory we show that basic need satisfaction can serve as an important driving force for those work outcomes and as a potential mediator in HRM research. Finally, based on SDT research and soft HRM theory, we identify several HRM practices which may foster basic need satisfaction.

Insert figure 1 about here

Identifying Relevant Work Outcomes

Several work outcomes have already been identified as outcomes of soft HRM practices. Turnover intention – defined as a conscious and deliberate willingness to leave the organization (Tett & Meyer, 1993) – is regarded as an important HRM outcome for several reasons. First of all, Hui, Wong and Tjosvold (2007) argue that employees who are considering leaving the organization are less willing to invest in the organization by performing effectively. In line with this argument, turnover intention was found to relate negatively to performance (e.g. Ashill, Rod & Carruthers, 2008; Hui et al., 2007). Secondly, intention to leave is considered and shown to be an important predictor of voluntary turnover (Jackofsky, 1984; Zimmerman, 2008). While turnover can have positive consequences such as opportunities for bringing in new knowledge, increased innovation, and increased opportunities for internal promotions, high rates of turnover are also often associated with inflated costs such as replacement costs in terms of recruitment

and selection, training and development costs for new staff, disruption of organizational activities in case the employee leaving has a key role in the organization and demoralization of employees who stay behind (Mobley, 1982; Staw, 1980). Accordingly, high turnover has been associated with reduced customer satisfaction (Koys, 2001), productivity (Huselid, 1995), future short-term revenue growth (Baron, Hannan & Burton, 2001), sales and profit (Kacmar, Andrews, Van Rooy, Steilberg & Cerrone, 2008). As such, research looking into how HRM practices can influence individual turnover intentions is considered important (Luna-Arocas & Camps, 2008). Because work attitudes are important predictors of turnover intention (Igbaria & Greenhaus, 1992; Tett & Meyer, 1993), HRM practices are generally assumed to influence turnover intention through those attitudes. Consistent with this line of thinking, Ashill et al. (2008) and Luna-Arocas and Camps (2008) found HRM practices such as training, empowerment, rewards, job enrichment, and job stability to affect turnover intention through job satisfaction and organizational commitment. Similarly, Saks, and Rotman (2006) found that while job characteristics such as autonomy and feedback foster work engagement, a higher level of work engagement subsequently lowers employees' intention to quit.

This study focuses on affective organizational commitment and work engagement as attitudes predicting turnover intention. Affective organizational commitment is defined as “*the emotional attachment to, identification with, and involvement in the organization*” (Meyer, Standly, Herscovitch & Topolnytsky, 2002: 21). Work engagement on the other hand is a relatively new term indicating “*a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption*” (Schaufeli, Bakker & Salanova, 2006: 702). Whereas affective organizational commitment is the attitude and attachment towards the organization, engagement encompasses a dedication and attachment towards the performance of one's job.

Both attitudes have already been shown to relate negatively to intention to quit (e.g. Meyer et al., 2002; Saks & Rotman, 2006; Schaufeli & Bakker, 2004). As employees who are engaged and affectively committed are likely to have a greater attachment to their organization and job they are believed to have a lower tendency to leave the organization (Saks & Rotman, 2006). This leads to our first hypotheses:

Hypothesis 1. Affective organizational commitment is negatively related to turnover intention.

Hypothesis 2. Work engagement is negatively related to turnover intention.

Introducing Basic Need Satisfaction into HRM Research

HRM and work outcomes. Past studies have already shown that implementing HRM practices is an important mean through which favorable outcomes can be fostered. For example, the presence of strong recruitment and selection practices, promotional opportunities, grievance resolution mechanisms, flexible benefit plans, employee responsibility, autonomy, and team work were found to relate positively to organizational commitment while compensation cuts were negatively associated with organizational commitment (Caldwell, Chatman & O'Reilly, 1990; Fiorito, Bozeman, Young & Meurs, 2007; Gould-Williams & Davies, 2005; Heshizer, 1994). In addition, satisfaction with and perceived adequacy of career development, training opportunities, and performance appraisal were established as predictors of organizational commitment (Kuvaas, 2008). Research looking into the relationship between HRM and work engagement is scarce but shows that job characteristics (autonomy, task identity, skill variety, task significance, feedback from others and the job), job resources (feedback, social support and

supervisory coaching), and organizational resources (autonomy, training and technology) have a positive impact on work engagement (Salanova, Agut and Peiró, 2005; Saks & Rotman, 2006; Schaufeli & Bakker, 2004).

When looking into the process through which HRM engenders favorable work outcomes, social exchange theory (SET) is generally called upon to explain results. Consistent with SET, HRM practices are argued to “*initiate positive exchange relationships especially when managers are able to provide evidence of consideration and concern for needs of the individual worker*” (Gould-Williams, 2007: 1630). As a positive exchange relationship is initiated through HRM practices, employees will reciprocate with positive attitudes and behavior towards the organization and/or job. Building on SET, some studies focus on social exchange mediators between HRM and work outcomes. For example, perceived organizational support (POS) which reflects an organization’s commitment to its employees was found to be influenced positively by HRM practices such as career development and benefits and reciprocated by affective organizational commitment (Meyer & Smith, 2000). In addition, trust in management has been established as mediator between high-performance work system practices and organizational commitment (Macky & Boxall, 2007).

While both the soft HRM approach and SET suggest that positive effects can be created by considering employee needs, few articles have focused on the potential mediating role of need satisfaction in the relationship between HRM practices and employee attitudes. On the one hand, some authors recognize the importance of need satisfaction but do not deliver empirical evidence. A first example is the high-involvement work systems model of Boxall and Macky (2009) that mentions need satisfaction as a potential mechanism through which high involvement HRM systems influence performance outcomes. In addition, Gellatly, Hunter, Currie, and Irving

(2009) suggested that basic need satisfaction may be the reason why development-, stability-, and reward-oriented practices influence organizational commitment. Furthermore, Vandenberg, Richardson and Eastman (1999) propose that offering training opportunities lowers turnover by satisfying the psychological needs of employees. On the other hand, Van den Broeck, Vansteenkiste, De Witte, and Lens (2008) empirically established basic need satisfaction as a mediator between job resources/job demands and vigor/emotional exhaustion. While these authors mainly focus on work aspects and do not go into detail on the possible role of HRM in basic need satisfaction, this study does show potential for including basic need satisfaction as an exploratory mechanism in organizational research.

In the remainder of this literature review we will build on previous self-determination research and soft HRM theory to identify HRM practices that may foster basic need satisfaction. However, before doing so, we will first elaborate on the concept of basic needs and how basic need satisfaction may generate favorable work outcomes.

Basic needs definition. Self-determination theory postulates three basic psychological needs inherent to every human, namely the need for autonomy, relatedness, and competence (Deci & Ryan, 2000; Van den Broeck et al., 2008). These needs refer to “*innate psychological nutriments that are essential for ongoing psychological growth, integrity and well-being*” (Deci & Ryan, 2000: 229). The need for autonomy entails experiencing choice, feeling like the initiator of one’s own actions, and acting from interest and integrated values (Deci & Ryan, 2000; 2004; Deci, Ryan, Gagné, Leone, Usunov and Kornazheva, 2001). This need can be satisfied by being able to make personal choices or by backing up externally induced requests (Deci & Ryan, 2000; Van den Broeck et al., 2008). The need for relatedness refers to a “*sense of mutual respect, caring and reliance with others*” (Deci et al., 2001: 931). Baumeister and Leary (1995) distinguish two

main features of the need for relatedness. It requires a person to interact frequently and affectively with other people and believe these people to care about his or her welfare (Baumeister & Leary, 1995). Finally, the need for competence concerns feeling effective and skillful in one's actions and believing that one can influence important outcomes (Stone, Deci & Ryan, 2009; Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte & Van den Broeck, 2007).

Basic needs satisfaction and work outcomes. In SDT, the assumption is made that need *satisfaction* is the crucial factor determining favorable work outcomes (Baard, Deci and Ryan, 2004). Consistent with this line of thought, basic need satisfaction has been found to predict employee well-being (Lynch, Plant & Ryan, 2005), job satisfaction (Ilardi, Leone, Kasser & Ryan, 1993; Mayer, Bardes and Piccolo, 2008), performance evaluations (Baard et al., 2004), vigor (Van den Broeck et al., 2008), dedication (Vansteenkiste et al., 2007), and affective organizational commitment (Greguras & Diefendorff, 2009). In addition, basic need satisfaction was found to relate negatively to emotional exhaustion (Van den Broeck et al., 2008).

Gagné and Deci (2005) propose that need satisfaction relates to favorable work outcomes *indirectly* through increased autonomous motivation. Autonomously motivated employees are motivated to do their job because they find it interesting, because it allows them to attain a valued personal goal or because it allows them to express their sense of self (Meyer & Gagné, 2008). In other words, autonomously motivated employees are employed in a work environment in which they find their job interesting, suited for attaining personal goals or for expressing themselves. Since the organization provides this work environment – for example through its human resource management policies – and leaving the organization may result in a loss of this favorable work environment, employees may generate more positive attitudes toward their job and/or organization out of a sense of reciprocity (Ganesan & Weitz, 1996). Social exchange

theory suggests a similar but more *direct* relationship between need satisfaction and work outcomes. More specifically, SET argues that employees will reciprocate with more favorable attitudes and behavior when their needs are satisfied. In line with previous research which links need satisfaction directly to work outcomes (e.g. Baard et al., 2004; Greguras & Diefendorff, 2009; Van den Broeck et al., 2008), we formulate the following hypotheses:

Hypothesis 3. Autonomy (H3a), relatedness (H3b), and competence (H3c) satisfaction are positively related to affective organizational commitment.

Hypothesis 4. Autonomy (H4a), relatedness (H4b), and competence (H4c) satisfaction are positively related to work engagement.

Identifying HRM Practices

Building on the principles of autonomy support (i.e. an interpersonal factor which involves “the supervisor understanding and acknowledging the subordinate’s perspective, providing meaningful information in a non-manipulative manner, offering opportunities for choice, and encouraging self-initiation” Baard et al., 2004: 2048) and research concerning SDT interventions in organizations, Stone et al. (2009) suggest a number of ways through which basic need satisfaction can be nurtured in the workplace. These authors mention among others (1) employee participation, (2) providing sincere and non-judgmental feedback, (3) offering educational and advancement opportunities, and (4) sharing knowledge. Based on these four ways of stimulating basic need satisfaction in the workplace, five soft HRM practices were selected in this present study. Stimulating participation is represented by direct employee participation. Regarding the provision of feedback, developmental appraisal is included. Next, training opportunities and

career development are included as educational and advancement opportunities within the organization. Finally, mentoring was chosen because mentors provide feedback and ensure that important knowledge is passed on to their protégés (McDowall-Long, 2004).

Direct employee participation. This HRM practice refers to a system of worker participation in management decision-making – for example on work issues – that is based on the direct involvement of individual employees (Heery & Noon, 2001). As this may give a signal to employees that the organization encourages active participation and discourages passive compliance, employees might experience more autonomy satisfaction. In addition, increased relatedness might be perceived as this (1) entails *frequent* interactions with other people, more specifically with colleagues *and* supervisors (making these interactions also more varied) and (2) may create an interpersonal and stable bond or relationship due to its periodic and structured nature. As such, both features of the need to relate defined by Baumeister and Leary (1995) are met. Finally, allowing employees to participate directly in the organization may be interpreted by them as a sign of competence, allowing for greater competence satisfaction.

Hypothesis 5a. Direct employee participation is positively related to autonomy, relatedness, and competence satisfaction.

Developmental appraisal. This HRM practice entails providing both positive and negative feedback about an employee's functioning, and discussing problems. It is also aimed at identifying areas of improvement without tying this to rewards or punishment (Snell & Dean, 1992). Because it consists of a mutual discussion stimulating participation from the employee, and because the controlling aspect of a performance appraisal is less emphasized, a developmental appraisal may relate positively to autonomy satisfaction. In addition, this HRM practice may foster relatedness satisfaction as these interactions may allow for an affective bond

or relationship to be built with the supervisor and/or HR manager. Finally, it can be argued that positive and negative feedback may lead to increased competence satisfaction. Positive feedback signals effectiveness, and thus immediately meets the need for competence. Next, Stone et al. (2009) propose that negative feedback may also foster competence if it is factual and non-judgmental. In that case it allows for mutual exploration of possibilities to solve the problem, and consents employees to learn from their mistakes. Because negative feedback in this context is not tied to punishment, but aimed at improving the employee's functioning, it might stimulate competence satisfaction.

Hypothesis 5b. Developmental appraisal is positively related to autonomy, relatedness, and competence satisfaction.

Training. Training implies offering employees the opportunity to understand their roles and develop the needed skills and abilities to perform in their job (Suazo, Martínez & Sandoval, 2009). Gellatly et al. (2009) argue that training opportunities may allow for autonomy satisfaction by increasing feelings of internal control. Next, it can be argued that training satisfies the need for relatedness because it may give employees the signal that they are valued and that the company is willing to invest in a long-term relationship with them (Suazo et al., 2009). In addition, training may allow for collaboration with other people such as colleagues and tutors which can stimulate relatedness satisfaction (Stone et al., 2009). Finally, the need for competence is nurtured by acquiring new skills and knowledge (Stone et al., 2009).

Hypothesis 5c. Training opportunities are positively related to autonomy, relatedness, and competence satisfaction.

Career development. Career development consists of activities or conversations in which an employee's career is planned, guided, and developed. Howard and Foster (1999) argue that career planning and/or internal career management signals career security to employees thus reducing threats of external control. As such we expect career development to increase autonomy satisfaction. Just like training, this HRM practice may satisfy the need for relatedness by giving employees the signal that they are valued and that the company is willing to invest in a long-term relationship with them (Suazo et al., 2009). Finally, planning, guiding, and developing an employee's career may be interpreted by employees as a sign of effectiveness or competence, satisfying the third basic need.

Hypothesis 5d. Career development relates positively to autonomy, relatedness, and competence satisfaction.

Mentoring. Ensher, Thomas, and Murphy (2001) define a mentor as someone in the organization with equal or greater experience than the protégé who serves as a positive role model and provides emotional and career support. Erdem and Aytemur (2008) argue that mentoring serves three main purposes namely provide career development, psychosocial support, and vocational support. As a career developer, a mentor can – as argued above – enhance an employee's sense of autonomy by signaling career security and reducing the threats of external control (Howard & Foster, 1999). Furthermore, by providing psychosocial support as a friend or counselor, frequent contact in a caring and stable relationship is established which nurtures relatedness (Baumeister & Leary, 1995). Finally, vocational support in the sense of access to technical information, technical expertise and constructive feedback is provided to the protégés. This may make them feel more capable of solving problems they encounter in the workplace and

allow them to learn from their mistakes, thus creating a sense of competence (Howard & Foster, 1999; Stone et al., 2009).

Hypothesis 5e. Mentoring is positively related to autonomy, relatedness, and competence satisfaction.

The above suggests that making these HRM practices available to employees fosters basic need satisfaction. However, increasingly a plea is being made away from considering the mere presence or availability of HRM practices in favor of considering its effectiveness or quality as perceived by employees (e.g. Boselie, Dietz & Boon, 2005; Edgar & Geare, 2005, Kinnie, Hutchinson, Purcell & Rayton, 2005). As such, it is argued that the way in which HRM is implemented by managers may matter equally or more than the mere presence or availability of HRM practices. Closely related to this line of thought, Baard (2004) argued that organizations have a number of means for stimulating satisfaction of the three basic needs but that especially managerial behavior is a very powerful tool for supporting basic need satisfaction. For example, ‘acknowledging the employees perspective’ is regarded as important managerial behavior to elicit basic need satisfaction (Baard, 2004; Stone et al., 2009). Similarly, soft HRM places the emphasis on managing employees as *humans* instead of resources (Guest, 1987; Truss et al., 1997). Moreover, theory Y suggests that employees want to be treated with ‘*consideration and a personal touch*’ (Carson, 2005). As such, we argue that taking into account the individuality of employees can be considered an important and valuable aspect of HRM. In order to capture this, we want to make a distinction between the presence or availability of an HRM practice and the degree to which individual employees perceive their own talents, interests, and expectations to

be taken into account within an HRM practice. We expect that the presence or availability of these HRM practices will generally have a strong signaling function – as argued above – while taking into account individual talents, interests, and expectations (e.g. by responding to specific individual training needs or interests) can have an additional satisfying effect. Firstly, it can be argued that this may additionally nurture autonomy satisfaction by (1) involving the employee more in the HRM practices and giving him or her some amount of control over them and (2) promoting personal and professional development thus avoiding feelings of external control (Stone et al., 2009). Secondly, the need to relate may be further satisfied by signaling affectivity and care for the employee, hence creating a more interpersonal and affective bond with the employee. Thirdly, by taking into account individual talents when implementing HRM practices, employees may become more aware of their talents, increasing their feeling of competence. In addition, by increasing an employee's involvement in or control over the HRM practice, this may also allow for a mutual exploration of possibilities for solving problems in the workplace thus allowing employees to learn from their mistakes and feel more competent. Moreover, specifically in the case of training opportunities, taking into account what individuals are interested in and require to function in the workplace may also additionally engender competence satisfaction. As such, we propose the following hypotheses:

Hypothesis 6. Taking into account the individual within direct employee participation (H6a), developmental appraisal (H6b), training (H6c), career development (H6d), and mentoring (H6e) has an additional positive effect on autonomy, relatedness, and competence satisfaction

Methodology

Procedure and Sample

This study draws on a nationwide web based survey concerning talent management conducted among Belgian employees during the months of April and May 2009. A total of 5749 employees completed the survey. The characteristics of the sample are summarized in table 1.

Insert table 1 about here

Measures

HRM practices. The presence of and the degree to which talents, interests, and expectations are taken into account within five HRM practices were measured. To achieve this, a multi-stage approach was used. Respondents were given a definition or description of an HRM practice and were asked to indicate whether the HRM practice applied to them with ‘yes’ or ‘no’. If the HRM practice applied to them, respondents were asked to assess the degree to which their talents, interests, and expectations are taken into consideration in that specific HRM practice. This was to be answered on a 5-point scale ranging from 1 (*no degree*) to 5 (*a very large degree*). If the HRM practice did not apply to them in their current job, respondents moved on to the next practice until all were questioned. First, we defined direct employee participation as periodic and structured consultations between management and staff concerning work and working conditions. Secondly, developmental appraisal was described as conversations in which strengths, weaknesses, and actions to improve future functioning are discussed. Next, the HR practice training was defined as training opportunities which are aimed at increasing an employee’s employability. Fourth, career planning was described as consisting of activities or conversations in which an employee’s career is planned, guided, and developed. Finally, we described mentoring as the availability of a mentor who gives advice to an employee and guides his or her career.

For analytic purposes, cumulative dummies were calculated. For each HRM practice a first dummy indicated whether the HRM practice applied to the respondent or not and a second dummy indicated whether talents, interests, and expectations were taken into consideration (indicated by a score of 4 or 5 on the corresponding scale) or not. In this way, we can (1)

separate the effect of the presence of HRM from the impact of taking into account individual talents, interests, and expectations and (2) compare those effects to see which one has the strongest impact on basic need satisfaction.

Basic need satisfaction. Basic need satisfaction was measured using the adapted version of the Basic Need Satisfaction at Work Scale of Van den Broeck et al. (2008). A total of 18 items (6 items for each need) were used to assess autonomy satisfaction (e.g. “I feel like I can pretty much be myself at work”), relatedness satisfaction (e.g. “People at work are real friends”), and competence satisfaction (e.g. “I don’t feel very competent at work”, reverse coded). All items were answered on a 5-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). A reliability analysis was executed which resulted in a cronbach’s alpha of .85 for autonomy, .87 for relatedness, and .86 for competence. Exploratory factor analysis (principal axis factoring, varimax rotation) on all 18 items resulted in three factors with an eigenvalue greater than 1, suggesting autonomy, relatedness, and competence are separate constructs.

Affective organizational commitment. Affective organizational commitment was assessed with Meyer & Allen’s (1997) 6-item scale (e.g. “I would be very happy to spend the rest of my career with this organization”) that was to be answered on a 5-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*) (cronbach’s alpha .84). Exploratory factor analysis (principal axis factoring, varimax rotation) resulted in one factor with an eigenvalue greater than 1, explaining 47% of the variance.

Work engagement. Schaufeli et al.’s (2006) shortened version of the Utrecht Work Engagement Scale was used to assess work engagement. On a 7-point scale ranging from 1 (*never*) to 7 (*every day*), respondents were asked to judge 9 items reflecting vigor, dedication, and absorption such as “At my work I feel bursting with energy”, “I feel happy when I’m

working intensely”, and “My job inspires me” (cronbach’s alpha .94). Contrary to previous research (e.g. Schaufeli et al., 2006) in which factor analysis resulted in three factors; in this study an exploratory factor analysis (principal axis factoring) revealed only one factor with an eigenvalue greater than 1 accounting for 64% of the variance. However, a first-order hierarchical confirmatory factor analysis showed that the 3 subscales vigor, dedication, and absorption loaded on one common factor work engagement (RMR = .04, SRMR = .04, RMSEA = .06, CFI = .99, NFI = .99), suggesting the three subfactors are present in the data but the 9 items can be grouped into one general work engagement scale for the data analysis.

Turnover intention. Turnover intention was measured by Jiang and Klein’s (2002) 3-item scale (e.g. “I often think about leaving this organization”). These items were to be answered on a 5-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*) (cronbach’s alpha .93). Exploratory factor analysis (principal axis factoring, varimax rotation) resulted in one factor with an eigenvalue greater than 1 accounting for 81% of the variance.

Control variables. Consistent with affective organizational commitment, work engagement, and turnover intention research, five demographic variables were used as control variables: age, education, gender, organizational, and position tenure (Meyer et al., 2002; Sonnentag, 2003; Langelaan, Bakker, van Doornen & Schaufeli, 2006; Lum, Kervin, Clark, Reid & Sirola, 1998). Recent basic need satisfaction research included age, education, and gender as control variables (Van den Broeck et al., 2008; Vansteenkiste et al., 2007). However, we also included organizational and position tenure since both could for example very well be positively related to perceived competence. As the correlation between both tenure variables is not excessively high (.62) and the Variance Inflation Factor was smaller than four (1.61), we can assume that

including both tenure variables does not cause multicollinearity in our data (Hair, Black, Babin, Anderson & Tatham, 2006; Kutner, Nachtsheim, Neter & Li, 2005).

Common method bias. As our data were collected from the same source – more specifically employees – our research may be susceptible to common method bias. However, Doty and Glick (1998) argue that measures that have undergone psychometric evaluation are less prone to common method bias. As we used validated measures for our variables, common method bias is therefore less likely in our study. Moreover, the Harman’s one-factor test (Podsakoff & Organ, 1986) also indicates that common method bias does not plague our study too much. An exploratory factor analysis on all the multi-item measures resulted in 6 factors with eigenvalues of 1 reflecting the six multi-item scales we used.

Results

Descriptive Statistics

A summary of the descriptive statistics and correlations are presented in Table 2 and 3. For each HRM practice the frequency of presence is given and the frequency, mean, and standard deviation of the degree to which individual talents, interests, and expectations are taken into consideration. For all continuous variables the means, standard deviations, and correlations are listed.

 Insert table 2 about here

 Insert table 3 about here

Analyses

In order to put our hypothesized model to the test, a path model was estimated in SAS. In this model the error terms of the three basic needs were allowed to correlate next to those of affective organizational commitment and work engagement. Following recommendations of Schreiber, Stage, King, Nora, and Barlow (2006), the fit of the model is evaluated using several goodness of fit indices: the NFI (.97), CFI (.97), SRMR (.03), RMR (.03), and RMSEA (.08). As the majority of those fit indices are well within the range of acceptance ($NFI \geq .95$, $CFI \geq .95$, $SRMR \leq .08$, RMR as small as possible, $RMSEA < .08$) we can conclude that our model fits the data well.

 Insert figure 2 about here

Examining the standardized parameter estimates in figure 2, we can conclude that turnover intention is predicted by both affective organizational commitment and work engagement as higher values resulted in a lower intention to leave the organization. As such, hypothesis 1 and 2

are confirmed. In line with our expectations, satisfaction of the need for autonomy (H3a/H4a) and relatedness (H3b/H4b) was related to higher affective organizational commitment and work engagement. However, whereas competence satisfaction seems to have a positive effect on work engagement (H4c), it was found to relate negatively to affective organizational commitment (H3c). As such, hypothesis 3 remains only partially supported while hypothesis 4 is fully supported.

Next, we can conclude that hypothesis 5a is partially confirmed. Direct employee participation is positively related to autonomy and relatedness but unrelated to competence. Hypothesis 6a is however fully supported. Considering individual talents, interests, and expectations in this HRM practice is significantly and positively associated with the satisfaction of all three needs. The presence of developmental appraisal was found to only affect relatedness satisfaction positively while taking into account the individual within this appraisal was found to be significantly and positively related to all three needs confirming hypothesis 5b partially and 6b fully. The presence of training was found to have a positive impact on autonomy and relatedness satisfaction but surprisingly has a negative impact on competence satisfaction, while taking into account individual talents, interests, and expectations when administering training is only positively related to autonomy and relatedness satisfaction. As such, both hypothesis 5c and 6c are partially confirmed. Allowing the individual to be taken into account within career development was found to be positively associated with autonomy and relatedness satisfaction while the mere presence of career development did not satisfy any of the three needs. In other words, hypothesis 5d was disconfirmed, whereas hypothesis 6d was partially confirmed. Finally, while being assigned a mentor related positively to autonomy and relatedness satisfaction it was found to have a negative impact on competence satisfaction. As such, hypothesis 5e is only

partially confirmed. The degree to which the mentor takes into account the talents, interests, and expectations of the protégé was found to result in higher autonomy and relatedness satisfaction confirming hypothesis 6e.

The five HRM practices and control variables explain 26% of the variance in autonomy satisfaction, 19% in relatedness satisfaction, and 4% in competence satisfaction. Satisfaction of the three needs explains 43% of the variance in affective organizational commitment and 46% of the variance in work engagement. Finally, 46% of the variance in turnover intention was explained by affective organizational commitment and engagement.

Discussion

This study contributes to the HRM-literature by examining the processes underlying the relationships between HRM and work outcomes, as hypothesized by soft HRM and social exchange theory. First of all, soft HRM and social exchange theory stress the importance of employee needs in the causal chain between HRM and work outcomes (Edgar & Geare, 2005; Gould-Williams, 2007; Kuvaas, 2008; Meyer & Allen, 1997). Our findings confirm this line of reasoning by showing that our five selected soft HRM practices generate favorable outcomes largely through satisfaction of the needs for autonomy and relatedness. This implies that employees who are surrounded by those HRM practices are more likely to experience a general feeling of autonomy and relatedness which in turn enhances their affective organizational commitment and work engagement and subsequently lowers their intention to leave the organization. In addition, this study provides increased insight into social exchange theory as our

findings suggest that employees may reciprocate with favorable attitudes if their basic psychological needs for autonomy and relatedness are satisfied.

Secondly, soft HRM, theory Y and SDT plead in favor of managing employees as humans in their own rights and acknowledging their perspective in order to generate favorable outcomes. We argued that next to the mere presence or availability of HRM practices in the workplace, taking into account individual talents, interests, and expectations within HRM practices may additionally contribute to satisfying the basic needs and consequently affective organizational commitment, work engagement, and turnover intention. Our findings lead us to conclude that in most cases bearing in mind the individual within an HRM practice by for example taking into account individual talents, interests or expectations when offering training opportunities is equally or more important than the mere presence. Consequently, our findings suggest that the way HRM is implemented may play an even larger role than their presence as such. This is in line with Edgar & Geare's (2005) findings which suggest that the quality of practices may matter more in terms of work outcomes than their presence or quantity. This also implies that future HRM research may benefit more from focusing methodologically on whether employees perceive HRM practices to be well implemented rather than on their presence or availability.

Nevertheless, this study also contains a few unexpected results, more specifically regarding the need for competence. First, we found competence satisfaction to influence affective organizational commitment negatively which contradicts previous theoretical (e.g. Deci & Ryan, 2004) and empirical research (e.g. Greguras & Diefendorff, 2009). A few reasons can be thought of to explain this peculiar result. Firstly, whether a high satisfaction of the need for competence leads to affective organizational commitment may depend on whether the employee feels

overqualified in his or her job. As such, an employee whose need for competence is highly satisfied but in addition feels highly overqualified may generate less favorable attitudes towards the job and organization than an employee who feels rightly qualified. As our survey also contained measures of two aspects of overqualification, namely the mismatch an employee perceives between his and her skills and those required for the job and the growth opportunities in the organization (Johnson & Johnson, 1997), we have put this theory to the test. However, when adding the interaction term between competence and overqualification (measured by either a perceived mismatch or perceived growth opportunities) to the general model, the main effects of competence persisted while the interaction effect showed to be insignificant. This suggests that overqualification cannot account for this unusual result. An alternative explanation might however be that employees whose competence satisfaction is high may also perceive their labor market worth and/or job alternatives to be high thwarting their commitment to the organization. In addition, employees who feel highly competent may experience this as a high input into the organization in terms of investment. Based on equity theory, one can imagine that these employees will expect more in return from the organization in terms of HRM practices than employees who feel less competent. As such, given the same HRM practices, employees who feel highly competent may generate less commitment towards the organization than less competent employees.

Secondly, while a positive effect was expected, training, and mentoring seemed to have a negative relationship with competence satisfaction. Korman (1970) argues that training and development policies should be ego-enhancing instead of ego-deflating. As such, a possible explanation for these seemingly contra-intuitive results might be that employees interpret being assigned training or a mentor as an embarrassment or a sign of incompetence (Suazo et al.,

2009), thwarting their competence satisfaction. However, also a reversed effect is plausible in a sense that less competent employees may be more likely to receive training or be assigned a mentor. Our data shows that 46% of the respondents who reported being assigned a mentor, had less than or one and a half year of experience in their function. Concerning training, 39% of the respondents who received training had less than or exactly one and a half year of job experience.

Practical implications

Ryan and Deci (2000) argue that research on the conditions that foster versus undermine basic need satisfaction has practical significance as it may help design social environments that optimize people's development, performance, and well-being. Our results indicate that such an environment can be created through implementing HRM practices and additionally through taking into account individual talents, interests, and expectations within those HRM practices. Based on our findings, table 4 provides an overview of which HRM practice fosters which need. We formulate some practical suggestions based on this table.

 Insert table 4 about here

Our findings firstly suggest that HR managers may benefit most from implementing direct employee participation in the form of regular employee consultations as this practice fosters all three needs. In addition, taking into account the employees' talents, interests, and expectations during those consultations seems to be of greater importance to basic need satisfaction than the mere presence of it. Secondly, it may also be worthwhile for HR managers to introduce developmental appraisals. Also in this case, great attention should be given towards taking into

account the individual as this affects basic need satisfaction substantially more than its mere presence. Thirdly, HR managers that offer training opportunities and consider the individual employee by for example tailoring training to individual talents, interests, and expectations can contribute to an environment in which both autonomy and relatedness satisfaction is heightened. Next, assigning a mentor to employees that is able to take into account the individual talents, interests, and expectations of his or her protégé can boost the autonomy and relatedness satisfaction of the protégé. In both the case of training and mentoring, special care should however be given to ensuring that employees do not interpret this practice as a sign of incompetence or as an embarrassment in order to avoid decreased competence satisfaction. Finally, implementing career development may lead to higher satisfaction of the need for autonomy and relatedness on the condition that the individual is taken into account within the practice (by for example considering specific talents or interests of an employee when discussing future career options) as merely implementing it would have no effect. Given the importance of taking into account the individual, we conclude with suggesting that organizations may benefit from training HRM actors, such as line managers, into identifying and bearing in mind individual talents, interests, and expectations when administering HRM practices.

Limitations and future research directions

This study is not without its limitations. First, although the causal arrows in our model are based on theoretical predictions and previous research findings, drawing definitive causal conclusions from the results is impossible considering the cross-sectional nature of our data. As such, we want to encourage future longitudinal research to confirm the causal relationships between our focal variables.

Next, our five HRM practices and control variables only manage to explain 4% of the variance in competence satisfaction, suggesting that the source of high or low competence satisfaction may lie elsewhere. Greguras and Diefendorff (2009) found the demands-abilities fit (D-A fit) – i.e. the perceived match between an employee's skills and abilities and those required to effectively perform one's job (Kristof-Brown, Zimmerman & Johnson, 2005) – to positively affect competence satisfaction. Our data confirms this effect as when we add D-A fit (measured by Resick, Baltes and Shantz's (2007) scale) to the general model, a clear relationship between D-A fit and competence emerges ($\gamma = .63$; $p < .05$) and the explained variance in competence satisfaction increases to 43%. Consequently, an organization's selection policies in which ideally a person with the right skills for the job is hired may play an important role in assuring a high D-A fit and thus a high level of competence satisfaction. As such, future research could focus on the role of selection in competence satisfaction. In addition, Korman (1970) suggests that an employee's self-perceived competence originates both from internal and external sources. He firstly identifies a personality characteristic named 'chronic self-esteem' which reflects the extent to which an employee generally considers himself or herself as a competent individual. Secondly, next to training and development policies, he also puts forward ego-enhancing leadership and supportive informal work groups as organizational factors facilitating perceived competence. We want to encourage future research to consider these alternative antecedents of competence satisfaction.

Another potential limitation of this study is that we did not include autonomous motivation in our model. Although linking basic need satisfaction directly to outcomes is consistent with most research done in this area (e.g. Baard et al., 2004; Greguras & Diefendorff, 2009; Van den Broeck et al., 2008), SDT does suggest basic need satisfaction to affect employee attitudes and

behavior through autonomous motivation. Future research could include autonomous motivation in order to put the broader theory of self-determination to the test in an organizational context. Gagné and Deci (2005) suggest that while the need for relatedness and competence are important in order to generate autonomous motivation, it is the need for autonomy which is crucial to tip the scale from controlled motivation to autonomous motivation. While most research combines the three needs into a general basic need satisfaction scale (e.g. Baard et al., 2004; Mayer et al., 2008; Van den Broeck et al., 2008), we want to encourage future research to consider the three needs separately and check whether this assumption empirically holds.

Finally, as previously mentioned, Baard (2004) argued that managerial behavior can be a very powerful tool for supporting satisfaction of the basic needs. Yukl, Gordon, and Taber (2002) suggest that leadership consists of three distinct types of behavior: task behavior (which aims at high resource efficiency and operational reliability), relations behavior (which aims at supporting, developing, recognizing, consulting, and empowering employees) and change behavior (e.g. by taking risks to implement change or by monitoring the external environment). As relations behavior is particularly aimed at subordinates, it seems plausible that this type of leadership behavior may affect to what degree subordinates are able to satisfy their basic needs. Mayer et al. (2008) took a first step in this direction by showing that servant leaders succeed at generating higher basic need satisfaction among their followers. Servant leaders are defined as leaders who show consideration and concern for their followers' needs, which is very similar to supportive behavior in Yukl et al.'s (2002) taxonomy of leadership behavior. However, it seems plausible that other types of relations behavior may foster basic need satisfaction among subordinates as well. *Recognizing* which refers to giving praise and showing appreciation to subordinates may very well tap into their competence satisfaction, while *empowering* by

delegating and providing more autonomy and discretion to subordinates may play into their autonomy satisfaction. As such, we want to encourage future research to consider the immediate supervisor as an important catalyst of basic need satisfaction next to HRM in the workplace and investigate which type(s) of leadership behavior can satisfy which basic need(s) among followers.

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Table 1

Demographic Characteristics of the Sample (n = 5748)

Gender		Functional domain	
Male	56%	Administration/central services	13%
Female	44%	Sales	13%
Age		ICT/Internet services	13%
18-29	36%	General management	12%
30-39	37%	Executive services	10%
40-49	21%	Human resources	8%
50+	7%	Financial services/accountancy	8%
Education		Technical support services	7%
High school degree or less	19%	Marketing/product development	5%
Bachelor degree	36%	Research and development	5%
Master degree	45%	Logistics and acquisition	4%
Functional level		Engineering	4%
Operational staff	27%	Employment contract	
Administrative staff	10%	Permanent	88%
Professional staff	31%	Temporary	12%
Middle management	27%		
Higher management	5%		

Table 2

Descriptive Statistics HR Measures

	<i>Frequency of presence HRM practice</i>	<i>Frequency of talent within HRM practice^b</i>	<i>Mean</i>	<i>SD</i>
<i>Direct employee participation</i>	53.77%			
Taking into account individual talents, interests, and expectations ^a		30.92%	2.94	1.01
<i>Developmental appraisal</i>	60.73%			
Taking into account individual talents, interests, and expectations ^a		32.18%	3.02	0.95
<i>Training</i>	54.17%			
Taking into account individual talents, interests, and expectations ^a		36.72%	3.17	0.92
<i>Career development</i>	38.75%			
Taking into account individual talents, interests, and expectations ^a		36.68%	3.14	0.92
<i>Mentoring</i>	38.82%			
Taking into account individual talents, interests, and expectations ^a		39.10%	3.21	0.95

^a degree to which talents, interests, and expectations are taken into account within the HRM practice mentioned above

^b calculated upon the number of respondents who receive the corresponding HRM practice

Table 3

Descriptive Statistics Continuous Variables

Variable	N	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Autonomy satisfaction	5744	3.32	0.61	1								
2. Relatedness satisfaction	5743	3.45	0.82	.45	1							
3. Competence satisfaction	5744	4.20	0.84	.26	.17	1						
4. Work engagement	5736	4.69	1.08	.64	.39	.28	1					
5. Affective organizational commitment	5730	3.07	0.88	.58	.51	.14	.60	1				
6. Turnover intention	5729	2.84	1.30	-.61	-.38	-.08	-.54	-.65	1			
7. Functional tenure (in years)	5748	3.96	4.95	.01 ^{ns}	-.03	.12	.02 ^{ns}	.00 ^{ns}	.06	1		
8. Organizational tenure (in years)	5748	4.92	5.96	.04	.03	.09	.06	.10	-.01 ^{ns}	.62	1	
9. Age (in years)	5748	34.63	8.60	.05	-.10	.12	.14	.05	-.01 ^{ns}	.46	.52	1

^{ns} non significant

Table 4

Which HRM Practice Influences Which Basic Need?

		Autonomy satisfaction	Relatedness satisfaction	Competence satisfaction
<i>Direct participation</i>	Presence	+	+	/
	Taking into account individual talents, interests, and expectations	+	+	+
<i>Developmental appraisal</i>	Presence	/	+	/
	Taking into account individual talents, interests, and expectations	+	+	+
<i>Training</i>	Presence	+	+	-
	Taking into account individual talents, interests, and expectations	+	+	/
<i>Career development</i>	Presence	/	/	/
	Taking into account individual talents, interests, and expectations	+	+	/
<i>Mentoring</i>	Presence	+	+	-

	Taking into account	+	+	/
	individual talents, interests,			
	and expectations			
+	Positive effect	-	Negative effect	/ No effect

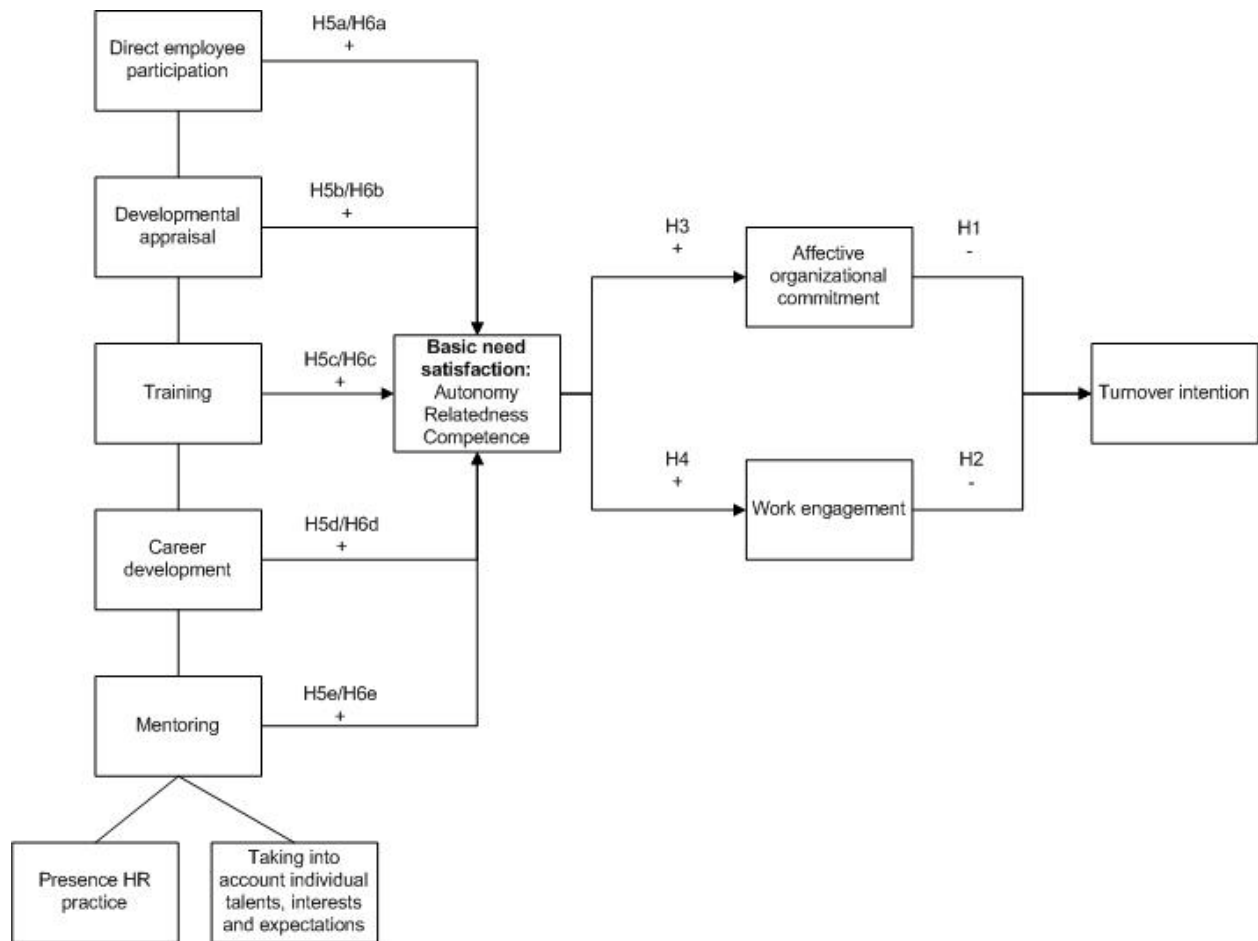
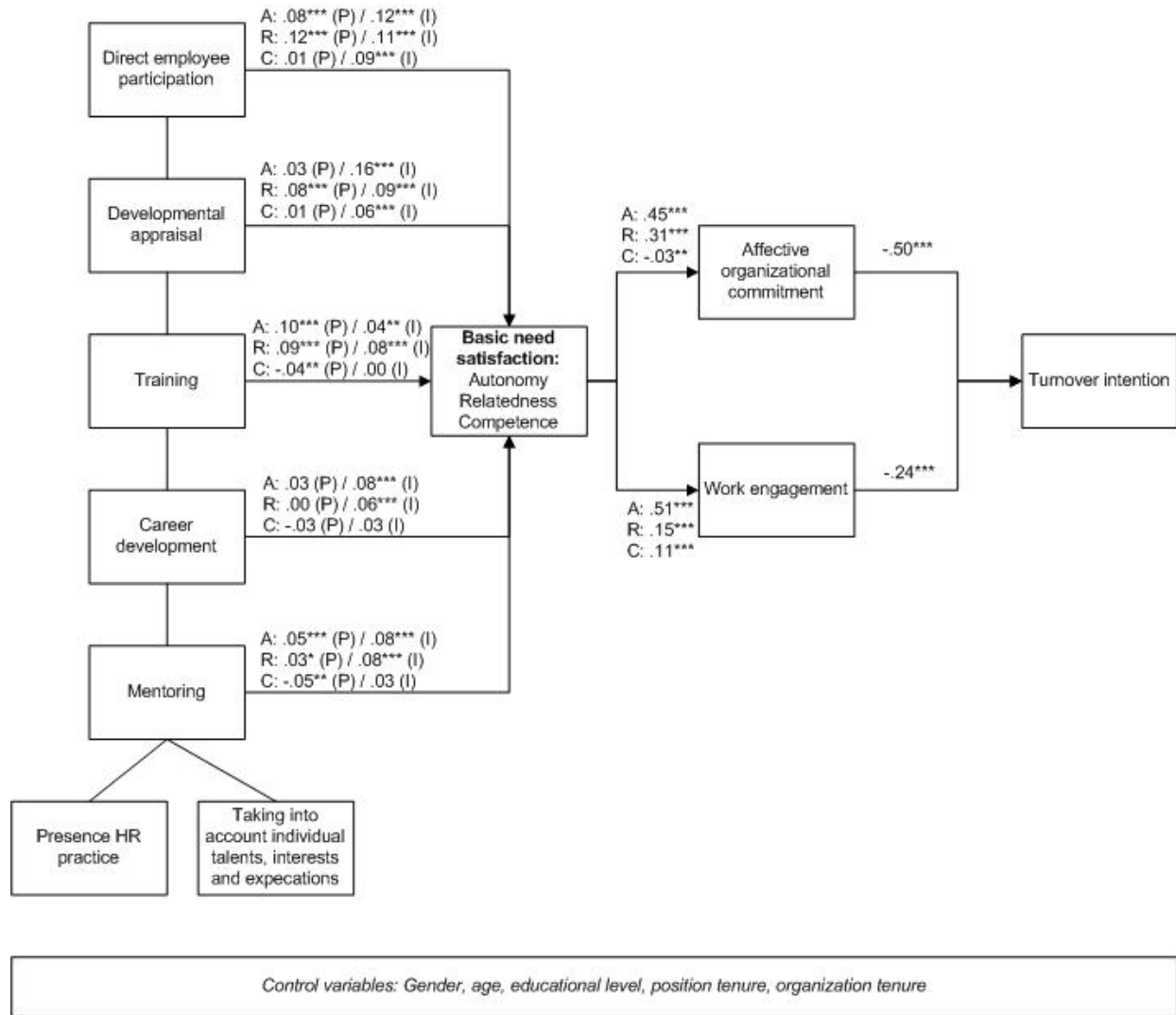


Figure 1. Conceptual model



A: Autonomy

R: Relatedness

C: Competence

(P): Effect of the presence of the HRM practice

(I): Additional effect of taking into account

* <.05 ** <.01 *** <.001

individual talents, interests, and expectations

Figure 2. Standardized estimates for the hypothesized path model